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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Brian R. Mears et al.

Title: MULTIPLE CHANNEL INTERFACE FOR COMMUNICATIONS BETWEEN DEVICES

Docket No.: 884.481US1

Filed: September 21, 2001

Examiner: Nimesh G. Patel

Serial No.: 09/961,024

Due Date: September 17, 2006 (Sunday)

Group Art Unit: 2112



**MS Appeal Brief - Patents**

Commissioner for Patents

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SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

(GENERAL)

S/N 09/961,024

PATENT

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Assignee: Intel Corporation  
Examiner: Nimesh Patel  
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Customer Number: 21186

REPLY BRIEF UNDER 37 C.F.R. § 41.41

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This Reply Brief is filed in response to the Examiner's Answer (hereinafter, the "Answer"), mailed July 17, 2006, and supplements the Appeal Brief filed by the appellants on June 12, 2006. Please charge any required additional fees or credit overpayments to Deposit Account 19-0743.

The Answer failed to establish a *prima facie* case of obviousness of claims 1-14, 16-18, 28-31, 33-44, and 49 that also had not been established in the final Office Action. The appellants refer to the arguments set forth in the Appeal Brief. The appellants will address this response to the holding in *In re Kahn*<sup>1</sup> which was decided recently by the Federal Circuit. The appellants respectfully submits that, even under the obviousness standard applied in *In re Kahn*, the final Office Action and the Answer fail to establish a *prima facie* case of obviousness.

*Baker, Earnest, and Holm are Not Analogous Art*

The rejection of claims 1-14, 16-18, 28-31, 33-34, 36-44, and 49 under 35 U.S.C. §103 is based on a combination of Baker with Earnest. The rejection of claim 35 under 35 U.S.C. §103 is based on a combination of Baker, Earnest, and Holm et al (Holm). The appellants respectfully submit that Baker, Earnest, and Holm are not analogous art. The analogous-art test defines "the prior art relevant for the obviousness determination."<sup>2</sup>

<sup>1</sup> *In re Kahn*, 78 USPQ2d 1329 (Fed. Cir. 2006).

<sup>2</sup> *In re Kahn*.

As stated in the Appeal Brief, Baker relates to a PCI-interface device<sup>3</sup> and both Earnest and Holm relate to a “multiple channel data communication buffer.”<sup>4</sup> While Baker, Earnest, and Holm relate to electrical circuits, Baker is from a different field of endeavor when compared with Earnest and Holm.

The devices and methods described in Baker are specifically directed to extracting control information from packetized data in an IEEE 1394 standard or similar PCI interface device.<sup>5</sup> One skilled in the art would not have been motivated to modify the PCI-interface ASIC 20 of Baker that complies with IEEE 1394<sup>6</sup> with the buffers of Earnest or Holm where Earnest and Holm have not been shown to be compliant with IEEE 1394. The appellants respectfully submits that Baker, Earnest, and Holm are not analogous and are not properly combinable in view of *In re Kahn*.

#### *The Rejections Lack a Rational Underpinning*

The appellants respectfully submit that the rejections under 35 U.S.C. §103 are based on hindsight which is not permissible according to *In re Kahn*:

“rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”<sup>7</sup>

“mere identification in the prior art of each element is insufficient to defeat the patentability of the combined subject matter as a whole.”<sup>8</sup>

The Answer fails to show the rational underpinning required by *In re Kahn*, but only points to what are intended to be elements of the claimed invention variously in Baker and Earnest, and then pronounces combination obvious for the following reason:

“Baker does not specifically disclose a stop message channel coupled to the receive control block and adapted to send a stop message to a source when a receive FIFO reaches a stop threshold value....it would have been obvious to include the stop message channel, as disclosed by Earnest, in the system of Baker, since this would prevent the writing of

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<sup>3</sup> Baker, Abstract.

<sup>4</sup> Earnest and Holm, Title.

<sup>5</sup> Baker, column 3, lines 5-11.

<sup>6</sup> Baker, column 5, lines 27-35.

<sup>7</sup> *In re Kahn* citing *In re Lee*, 61 USPQ2d 1430 (Fed. Cir. 2002).

<sup>8</sup> *In re Kahn*.

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data in FIFO that has no more room for data.”<sup>9</sup>

The Answer failed to find any specific support for this rationale in Baker or Earnest, but stated that the source of the above-quoted rationale for combining Baker and the buffer of Earnest is “knowledge generally available to one of ordinary skill in the art.”<sup>10</sup> The appellants respectfully submit that even if the rationale is not found in the applied references or other prior art, the Answer must show that the rationale has a rational underpinning. The statement in the Answer that the rationale is “knowledge generally available” is conclusory and entirely without rational underpinning. Such hindsight reasoning is impermissible according to *In re Kahn*.

The rationale in the Answer fails to address the weakness of the proposed modification of Baker according to Earnest. The devices and methods described in Baker are specifically directed to extracting control information from packetized data in an IEEE 1394 standard or similar PCI interface device.<sup>11</sup> The Answer has not shown why a skilled person would be motivated to modify the system of Baker that complies with IEEE 1394. The Answer has not shown evidence that the system of Baker that is compliant with IEEE 1394 is deficient in a way that can be remedied by addition of the “FULL” flag of the receive FIFO 18 of Earnest.

The Answer has also not shown where the “FULL” flag of the receive FIFO 18 of Earnest is to be added to the system of Baker. Baker describes the PCI-interface ASIC 20 in detail, and the Answer has not shown where in the detailed ASIC 20 of Baker the “FULL” flag of the receive FIFO 18 of Earnest is to be added. The PCI-interface ASIC 20 of Baker complies with IEEE 1394.<sup>12</sup> The Answer has not shown that the buffer of Earnest is compliant with IEEE 1394. The Answer has not shown how the system of Baker that is compliant with IEEE 1394 can be modified by elements of Earnest and still maintain compliance with IEEE 1394.

With respect to the rejection of claim 35, Holm like Earnest relates to a “multiple-channel data communication buffer.” The Answer states:

“it would have been obvious to use the teachings of Holm in the system of Baker and Earnest, to use a bus with varying width since this would increase compatibility.”<sup>13</sup>

This rationale, to “increase compatibility,” is a broad, general statement that does not

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<sup>9</sup> Answer, page 4.

<sup>10</sup> Answer, page 12.

<sup>11</sup> Baker, column 3, lines 5-11.

<sup>12</sup> Baker, column 5, lines 27-35.

<sup>13</sup> Answer, page 11.

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address the specific differences between Baker, Earnest, and Holm. The Answer has not shown why one skilled in the art would be motivated to modify the system of Baker that is compliant with IEEE 1394 according to Holm, Holm not being shown to be compliant with IEEE 1394. The above-quoted rationale is without a rational underpinning. Such hindsight reasoning is impermissible according to *In re Kahn*.

The rejections are based on impermissible hindsight reasoning without a rational underpinning grounded in evidence.

#### *Official Notice Improper*

The Answer states with respect to claim 7:

“Official Notice is being taken that advantages of power management are well known in the art and it would have been obvious to include a power management unit in the system of Baker since this would allow power to be saved.”<sup>14</sup>

The Answer appears to be taking official notice that a claimed feature is obvious, and the appellants respectfully traverse. Official notice cannot be used to establish obviousness when *Graham* requires a factual inquiry and *In re Lee* and *In re Vaeck*<sup>15</sup> demand a showing of evidence to support the legal conclusion. Official notice should only be used where the facts asserted are capable of instant and unquestionable demonstration according to *In re Ahlert*<sup>16</sup>. The “state of the art” is not an appropriate subject of official notice according to *In re Eynde*<sup>17</sup>. The appellants respectfully submit that the official notice taken in the Answer is improper, and that the affected claims are in condition for allowance.

#### *Cited References Not Applied*

The Answer lists five references, Bennett, Fung, Gulick, Dahlen, and Vernon et al.,<sup>18</sup> in support of the rejections. Bennett, Fung, Gulick, Dahlen, and Vernon et al. were not included in the statements of the grounds of rejection in the Answer. Reliance on a reference to support a ground of rejection that is not included in the statement of the rejection is impermissible

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<sup>14</sup> Answer, page 5.

<sup>15</sup> *In re Vaeck*, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991).

<sup>16</sup> *In re Ahlert*, 165 USPQ 418, 420 (CCPA 1970).

<sup>17</sup> *In re Eynde*, 178 USPQ 470, 474 (CCPA 1973).

<sup>18</sup> Answer, page 12.

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according to *In re Hoch*<sup>19</sup> and *Ex parte Raske*.<sup>20</sup> The appellants respectfully submit that Bennett, Fung, Gulick, Dahlen, and Vernon et al. cannot be relied on to support any grounds of rejection.

The appellants respectfully submits that a *prima facie* case of obviousness against claims 1-14, 16-18, 28-31, 33-44, and 49 has not been established in the Answer, and that claims 1-14, 16-18, 28-31, 33-44, and 49 are in condition for allowance.

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<sup>19</sup> *In re Hoch*, 166 USPQ 406, 407 n.3 (CCPA 1970).

<sup>20</sup> *Ex parte Raske*, 28 USPQ2d 1304, 1304-05 (Bd. Pat. App. & Int. 1993).

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### CONCLUSION

The appellants respectfully submits that the rejections of claims 1-14, 16-18, 28-31, 33-44, and 49 under 35 U.S.C. §103 were erroneous. Reversal of these rejections is respectfully requested.

The Examiner is invited to telephone Applicant's attorney at (612) 373-6973 to facilitate the prosecution of this application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date 18 September 2006 By \_\_\_\_\_

  
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